

Form PTO-1449 (Rev. 2-32) INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No. RD-28007	Serial No. 10/040,420 T B Assigned
	Applicant: Radislav A. Potyrailo			
	Filing Date October 7, 1999		Group To B Assigned	

28 U.S. PTO
 10/040420
 01/09/02

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
m/b	4,780,859	10/25/1998	Hadidi, et al.	367	43	
m/b	5,000,183	3/19/1991	Bonnefous, et al.	600	437	
m/b	5,436,447	7/25/1995	Shew	399	1	
m/b	5,497,777	3/12/1996	Abel-Malek, et al.	600	443	
m/b	5,528,725	6/18/1996	Hui	704	236	
m/b	5,561,431	10/1/1996	Peele, et al.	342	90	
m/b	5,619,998	4/15/1997	Abdel-Malek, et al	600	437	
m/b	5,587,931	12/24/1996	Jones, et al.	702	34	
m/b	5,638,823	6/17/1997	Akay, et al.	600	528	
m/b	5,667,244	9/16/1997	Ito, et al.	280	735	
m/b	5,671,330	9/23/1997	Sakamoto, et al.	704	268	
m/b	5,740,036	4/14/1998	Ahuja, et al.	702	17	
m/b	5,885,841	3/23/1999	Higgs, Jr., et al.	436	89	
m/b	5,923,785	7/13/1999	Dube	382	240	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

m/b	Alsberg, B. K.; Woodward, A. M.; Kell, D. B., An introduction to wavelet transforms for chemometricians: a time-frequency approach, <i>Chemom. Intell. Lab. Syst.</i> , 1997 , 37, 215-239. ✓
m/b	Amara, IEEE Computational Sciences and Engineering, 1995 , 2, 50-61. ✓
m/b	Antoine, J.-P.; Chauvin, C.; Coron, A. Wavelets and related time-frequency techniques in magnetic resonance spectroscopy. <i>NMR Biomed.</i> , 2001 , 14(4), 265-270. ✓
m/b	Artursson, Tom; Hagman, Anders; Bjork, Seth; Trygg, Johan; Wold, Svante; Jacobsson, Sven P. Study of preprocessing methods for the determination of crystalline phases in binary mixtures of drug substances by X-ray powder diffraction and multivariate calibration. <i>Appl. Spectrosc.</i> , 2000 , 54(8), 1222-1230. ✓
m/b	Barclay, V. J.; Bonner, R. F.; Hamilton, I. P. Application of Wavelet Transforms to Experimental Spectra: Smoothing, Denoising, and Data Set Compression. <i>Anal. Chem.</i> , 1997 , 69(1), 78-90. ✓

DATE CONSIDERED

9/29/00

Form PTO-1449 (Rev. 2-32) INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Department of Commerce Patent & Trademark Office	Atty. Docket No. RD-28007	Serial No. 10/040,2420 To Be Assigned
	Applicant: Radislav A. Potyrailo		
	Filing Date October 7, 1999	Group To Be Assigned	

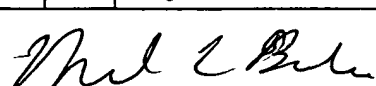
U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
m/b	6,094,050	7/25/2000	Zaroubi et al.	324	309	
m/b	6,108,609	8/22/2000	Qian et al.	702	66	
m/b	6,119,026	9/12/2000	McNulty et al.	600	310	
m/b	6,208,951	3/27/2001	Kumar et al.	702	191	
m/b	6,253,162	6/26/2001	Jarman et al.	702	179	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

m/b	Beebe, K. R., Pell, R. J., and Seasholtz, M. B., <i>Chemometrics: A Practical Guide</i> , 1998, pp. 6, 229, Wiley, New York, NY. 279
m/b	Bos, M.; Hoogendam, E., Wavelet transform for the evaluation of peak intensities in flow-injection analysis, <i>Anal. Chim. Acta</i> , 1992, 267, 73-80.
m/b	Bos, M.; Vrieling, J. A. M., The wavelet transform for pre-processing IR spectra in the identification of mono- and di-substituted benzenes, <i>Chemom. Intell. Lab. Syst.</i> , 1994, 23, 115-122.
m/b	C. L. Philips and J. M. Parr, Signals, Systems, and Transforms, 1999, pp. 2, 174, 289, 390, Prentice Hall, Upper Saddle River, NJ.
m/b	Cai, Chunsheng; de Harrington, Peter. Different discrete wavelet transforms applied to denoising analytical data. <i>J. Chem. Inf. Comput. Sci.</i> , 1998, 38(6), 1161-1170.
m/b	Cai, Wensheng; Wang, Liya; Pan, Zhongxiao; Zuo, Jian; Xu, Cunyi; Shao, Xueguang. Application of the wavelet transform method in quantitative analysis of Raman spectra. <i>J. Raman Spectrosc.</i> , 2001, 32(3), 207-209.
m/b	Chau, F. T.; Shih, T. M.; Gao, J. B.; Chan, C. K., Application of the fast wavelet transform method to compress ultraviolet-visible spectra, <i>Appl. Spectrosc.</i> , 1996, 50, 339-348.
m/b	D. A. Skoog and G. G. Leary, <i>Principles of Instrumental Analysis</i> , 4 th Ed., Saunders College Publishing, Fort Worth, TX, 1992, p. 592.
m/b	Depczynski, U.; Jetter, K.; Molt, K.; Niemoller, A. The fast wavelet transform on compact intervals as a tool in chemometrics II. Boundary effects, denoising and compression. <i>Chemom. Intell. Lab. Syst.</i> , 1999, 49(2), 151-161.
m/b	Donoho, D., Different perspectives on Wavelets, Proceeding of Symposia in Applied Mathematics, 1993, 47, 173-205.

[Signature]	DATE CONSIDERED 9/29/00
-------------	-------------------------

Form PTO-1449 (Rev. 2-32)		Department of Commerce Patent & Trademark Office		Atty. Docket No. RD-28007		Serial No. 10/040,420 To Be Assigned	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				Applicant: Radislav A. Potyrailo			
				Filing Date October 7, 1999		Group To B Assigned	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
m/b		Einax, J. W.; Zwanziger, H. W.; Geiss, S. <i>Chemometrics in Environmental Analysis</i> , 1997, p.164, VCH, Weinheim.					
m/b		Estienne, F.; Massart, D. L.; Zanier-Szydlowski, N.; Marteau, P. Multivariate calibration with Raman spectroscopic data: a case study. <i>Chim. Acta</i> , 2000, 424(2), 185-201.					
m/b		F. Ehrentreich and L. Summchen. Spike Removal and Denoising of Raman Spectra by Wavelet Transform Methods, <i>Analytical Chemistry</i> , 2001, in press.					
m/b		Gunther, Ulrich L.; Ludwig, Christian; Ruterjans, H. NMRLAB-Advanced NMR Data Processing in Matlab. <i>J. Magn. Reson.</i> , 2000, 145(2), 201-208.					
m/b		Hierlemann, A., Schweizer-Berberich, M., Weimar, U., Kraus, G., Pfau, A., and Göpel, W., In <i>Sensors Update, Vol. 2</i> ; Eds., H. Baltes, W. Göpel, and J. Hesse, VCH, Weinheim, 1996, pp 119-180.					
m/b		Jetter, K.; Depczynski, U.; Molt, K.; Niemoller, A. Principles and applications of wavelet transformation to chemometrics. <i>Anal. Chim. Acta</i> , 2000, 420(2), 169-180.					
m/b		Jouan-Rimbaud, D.; Walczak, B.; Poppi, R. J.; de Noord, O. E.; Massart, D. L., Application of wavelet transform to extract the relevant component from spectral data for multivariate calibration, <i>Anal. Chem.</i> , 1997, 69, 4317-4323.					
m/b		Leung, Alexander Kai-Man; Chau, Foo-Tim; Gao, Jun-Bin. A review on applications of wavelet transform techniques in chemical analysis: 1989-1997. <i>Chemom. Intell. Lab. Syst.</i> , 1998, 43(1,2), 165-184.					
m/b		Mao, Jun Jun; Sun, Pei Yan; Pan, Zhong Xiao; Su, Qing De. Wavelet analysis on photoacoustic spectra of degraded PVC. <i>Fresenius' J. Anal. Chem.</i> , 1998, 361(2), 140-142.					
m/b		Martens, H.; Martens, M. <i>Multivariate Analysis of Quality. An Introduction</i> ; Wiley: Chichester, England, 2001, p 5-6.					
				DATE CONSIDERED 9/29/03			

Form PTO-1449 (Rev. 2-32)		Department of Commerce Patent & Trademark Office		Atty. Docket No. RD-28007		Serial No. To Be Assigned	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				Applicant: Radislav A. Potyrailo			
				Filing Date October 7, 1999		Group To Be Assigned	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
m/b		McQuay, James A.; Karanassios, Vassili. Wavelet de-noising of transient signals generated from micro-samples and ITV-ICP-AES and comparison with digital filtering obtained using fast Fourier and fast Hartley-transforms. Can. Editor(s): Clement, Ray; Burk, Bob. EnviroAnal. 2000, Proc. Bienn. Int. Conf. Monit. Meas. Environ., 3rd 2000, 149-154, Publisher: EnviroAnalysis 2000 Conference secretariat, Ottawa, Ont.					
m/b		Mittermayr, C. R.; Lendl, B.; Rosenberg, E.; Grasserbauer, M. The application of the wavelet power spectrum to detect and estimate 1/f noise in the presence of analytical signals. Anal. Chim. Acta, 1999, 388(3), 303-313.					
m/b		Mittermayr, C. R.; Nikolov, S. G.; Hutter, H.; Grasserbauer, M., Wavelet denoising of Gaussian peaks: a comparative study, Chemom. Intell. Lab. Syst., 1996, 34, 187-202.					
m/b		Naes, T.; Isaksson, T.; Kowalski, B., Locally weighted regression and scatter correction for near-infrared reflectance data, Analytical Chemistry, 1990, 62, 664-673.					
m/b		Nikolov, S. G.; Hutter, H.; Grasserbauer, M., De-noising of SIMS images via wavelet shrinkage, Chemom. Intell. Lab. Syst. 1996, 34, 263-273.					
m/b		Otto, M. Chemometrics: Statistics and Computer Application in Analytical Chemistry, 1999, p. 215, Wiley-VCH, Weinheim, Germany.					
m/b		P.J. Treado and M.D. Morris, A Thousand Points of Light: The Hadamard Transform in Chemical Analysis and Instrumentation, Analytical Chemistry, 1989, 61, 723A-734A.					
m/b		Pasti, L.; Walczak, B.; Massart, D. L.; Reschiglian, P. Optimization of signal denoising in discrete wavelet transform. Chemom. Intell. Lab. Syst., 1999, 48(1), 21-34.					
m/b		Ren, Shouxin; Gao, Ling. Simultaneous quantitative analysis of overlapping spectrophotometric signals using wavelet multiresolution analysis and partial least squares. Talanta, 2000, 50(6), 1163-1173.					
m/b		Roy, Manojit; Kumar, V. Ravi; Kulkarni, B. D.; Sanderson, John; Rhodes, Martin; Stappen, Michel vander. Simple denoising algorithm using wavelet transform. AIChE J., 1999, 45(11), 2461-2466.					
m/b		Sadler, D. A.; Boulo, P. R.; Soraghan, J. S.; Littlejohn, D. Tutorial guide to the use of wavelet transforms to determine peak shape parameters for interference detection in graphite-furnace atomic absorption spectrometry. Spectrochim. Acta, Part B, 1998, 53B(6-8), 821-835.					
MILC Rule				DATE CONSIDERED 9/29/03			

Form PTO-1449 (Rev. 2-32)		Department of Commerce Patent & Trademark Office		Atty. Docket No. RD-28007		Serial No. To B Assigned	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				Applicant: Radislav A. Potyrailo			
				Filing Date October 7, 1999		Group To Be Assigned	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
m/b		Sadler, D. A.; Littlejohn, D.; Boulo, P. R.; Soraghan, J. S. Application of wavelet transforms to determine peak shape parameters for interference detection in graphite-furnace atomic absorption spectrometry. Spectrochim. Acta, Part B, 1998, 53B(6-8), 1015-1030.					
m/b		Savitsky, A. and M. Golay, Smoothing and Differentiation of Data using Simplified Least-Squares Procedures, Analytical Chemistry, 1964, 36, 1627-1639.					
m/b		Shao, Xue Guang; Li, Wan; Chen, Gang; Su, Qing De. Online analysis of the photoacoustic spectral signal using wavelet transform. Fresenius' J. Anal. Chem., 1999, 363(3), 215-218.					
m/b		Shao, Xueguang; Cai, Wensheng. A novel algorithm of the wavelet packets transform and its application to de-noising of analytical signals. Anal. Lett., 1999, 32(4), 743-760.					
m/b		Shao, Xueguang; Cai, Wensheng. Wavelet analysis in analytical chemistry. Rev. Anal. Chem., 1998, 17(4), 235-285.					
m/b		Shao, Xueguang; Cai, Wensheng; Pan, Zhongxiao. Wavelet transform and its applications in high performance liquid chromatography (HPLC) analysis. Chemom. Intell. Lab. Syst., 1999, 45(1,2), 249-256.					
m/b		Shao, Xueguang; Hou, Shuquan. An on-line wavelet transform for de-noising of high performance liquid chromatograms. Anal. Lett., 1999, 32(12), 2507-2520.					
m/b		Shao, Xueguang; Pang, Chunyan; Su, Qingde. A novel method to calculate the approximate derivative photoacoustic spectrum using continuous wavelet transform. Fresenius' J. Anal. Chem., 2000, 367(6), 525-529.					
m/b		Shao, Xueguang; Sun, Li. An application of the continuous wavelet transform to resolution of multicomponent overlapping analytical signals. Anal. Lett., 2001, 34(2), 267-280.					
m/b		Shao, Xueguang; Yu, Fang; Kou, Hongbing; Cai, Wensheng; Pan, Zhongxiao. A wavelet-based genetic algorithm for compression and de-noising of chromatograms. Anal. Lett., 1999, 32(9), 1899-1915.					
m/b		Shao, Xueguang; Gu, Hua; Wu, Jihui; Shi Yunyu. Resolution of the NMR spectrum using wavelet transform. Appl. Spectrosc., 2000, 54(5), 731-738.					
Melz Bue				DATE CONSIDERED 9/29/03			

Form PTO-1449 (Rev. 2-32)		U.S. Department of Commerce Patent & Trademark Office		Atty. Docket No. RD-28007		Serial No. To Be Assigned	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				Applicant: Radislav A. Potyrailo			
				Filing Date October 7, 1999		Group To Be Assigned	
U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub- Class	Filing Date (if appropriate)
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
m/b		Smrcek, Lubomir; Durik, Marian; Jorik, Vladimir. Wavelet denoising of powder diffraction patterns. Powder Diff., 1999, 14(4), 300-304.					
m/b		Sternickel, Karsten; Effern, Arndt; Lehnertz, Klaus; Schreiber, Thomas; David, Peter. Nonlinear noise reduction using reference data. Phys. Rev. E: Stat., Nonlinear, Soft Matter Phys., 2001, 63(3-2), 036209/1-036209/4.					
m/b		T. Masters, <i>Signal and Image Processing With Neural Networks. A C++ Sourcebook</i> , 1994, p. 150, Wiley, New York, NY.					
m/b		Teppola, Pekka; Minkinen, Pentti. Wavelets for scrutinizing multivariate exploratory models - interpreting models through multiresolution analysis. Chemometrics Group, Laboratory of Inorganic and Analytical Chemistry, J. Chemom., 2001, 15(1), 1-18.					
m/b		Thompson, Robert Q., Experiments in Software Data Handling, Journal of Chemical Education, 1985, 62, 866-869.					
		Vandeginste, B.G.M., Massart, D.L., Buydens, L.M.C., Dejong, S., Lewi, P.J., and Smeyers-Verbeke, J., Handbook of Chemometrics and Qualimetrics Part B, 1998, pp. 535-553, Elsevier, Amsterdam, The Netherlands.					
m/b		Walczak, B.; Bouveresse, E.; Massart, D. L., Standardization of near-infrared spectra in the wavelet domain, Chemom. Intell. Lab. Syst. 1997, 36, 41-51.					
m/b		Walczak, B.; Massart, D. L., Noise suppression and signal compression using the wavelet packet transform, Chemom. Intell. Lab. Syst. 1997, 36, 81-94.					
m/b		Walczak, B.; Massart, D. L., Wavelets - something for analytical chemistry?, Trends Anal. Chem., 1997, 16, 451-463.					
m/b		Walczak, B.; van den Bogaert, B.; Massart, D. L., Application of wavelet packet transform in pattern recognition of near-IR data, Anal. Chem., 1996, 68, 1742-1747.					
m/b		Wolkenstein, M.; Stubbings, T.; Hutter, H. Robust automated three-dimensional segmentation of secondary ion mass spectrometry image sets. Fresenius' J. Anal. Chem., 1999, 365(1-3), 63-69.					
m/b		Young, K.; Soher, B. J.; Maudsley, A. A., Automated spectral analysis II: Application of wavelet shrinkage for characterization of non-parameterized signals, Magn. Reson. Med., 1998, 40, 816-821.					
<i>MWZ</i>				DATE CONSIDERED <i>9/29/03</i>			